

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended): An optical film comprising:
 - a polarizing plate; and
 - a brightness enhancement film comprising a layer having a circularly polarized light separating function, and a quarter wavelength plate;
 - wherein the quarter wavelength plate comprises
 - a retardation film satisfying $n_x^r > n_y^r = n_z^r$, and
 - a liquid crystal layer satisfying $n_z^c > n_x^c \geq n_y^c$,
 - where " n_x^r, n_y^r, n_z^r " and " n_x^c, n_y^c, n_z^c " indicate refractive indices in an X-axis direction, a Y-axis direction and a Z-axis direction in the retardation film and the liquid crystal layer, respectively, with the X-axis direction being an axial direction exhibiting a maximum refractive index within a plane of the retardation film or the liquid crystal layer, the Y-axis direction being an axial direction perpendicular to the X axis within the plane and the Z-axis direction being a thickness direction perpendicular to the X axis and the Y axis, and
 - wherein a maximum chromaticity difference $\Delta xy(\max)$ of in-plane transmitted light of the optical film is about 0.008 or smaller after the optical film is attached to a glass plate and allowed to stand at 70°C for 120 hours.

2. (Canceled)

3. (Currently amended): The optical film according to claim 2 ~~1~~, wherein an in-plane

retardation ($\Delta n d$) with respect to incident light from a normal direction of the quarter wavelength plate satisfies

$$\Delta n d(450 \text{ nm}) / \Delta n d(550 \text{ nm}) \leq 1.02,$$

where $\Delta n d$ is $(n_x - n_y) \cdot d$, n_x and n_y respectively represent refractive indices in an X-axis direction and a Y-axis direction in the quarter wavelength plate, with the X-axis direction being an axial direction exhibiting a maximum refractive index within a plane of the quarter wavelength plate and the Y-axis direction being an axial direction perpendicular to the X axis within the plane, d represents a thickness of the quarter wavelength plate, $\Delta n d(450 \text{ nm})$ represents an in-plane retardation at a wavelength of 450 nm, and $\Delta n d(550 \text{ nm})$ represents an in-plane retardation at a wavelength of 550 nm.

4. (Currently amended): The optical film according to claim 2 1, wherein an in-plane retardation ($\Delta n d'$) with respect to incident light from a direction inclined by 45° from a normal direction of the quarter wavelength plate satisfies

$$\Delta n d'(450 \text{ nm}) / \Delta n d'(550 \text{ nm}) \leq 1.04,$$

where $\Delta n d'$ is $(n_{x'} - n_{y'}) \cdot d$, $n_{x'}$ and $n_{y'}$ respectively represent refractive indices in an X'-axis direction and a Y'-axis direction with respect to the incident light from the direction inclined by 45° from the normal direction (a Z'-axis direction) of the quarter wavelength plate, with the X'-axis direction being an axial direction within a plane of the quarter wavelength plate perpendicular to an incident direction of the incident light inclined by 45° from the Z'-axis direction and the Y'-axis direction being a direction perpendicular to the incident direction and the X'-axis direction, d represents a thickness of the quarter wavelength plate, $\Delta n d'(450 \text{ nm})$

represents an in-plane retardation at a wavelength of 450 nm, and $\Delta n d'(550 \text{ nm})$ represents an in-plane retardation at a wavelength of 550 nm.

5. (Canceled)

6. (Currently amended): The optical film according to claim 2 1, wherein the quarter wavelength plate is a film comprising a polymer having a photoelastic coefficient of $40 \times 10^{-12} \text{ m}^2/\text{N}$ or smaller.

7. (Original): The optical film according to claim 6, wherein the quarter wavelength plate is a liquid crystal layer comprising a nematic liquid crystal.

8. (Currently amended): The optical film according to claim 2 1, wherein constituent molecules of the layer having the circularly polarized light separating function are oriented in such a manner as to have a cholesteric structure.

9. (Original): The optical film according to claim 8, wherein the layer having the circularly polarized light separating function is a cholesteric liquid crystal layer.

10. (Original): The optical film according to claim 1, wherein the polarizing plate and the brightness enhancement film are laminated via a pressure sensitive adhesive or an adhesive.

11. (Original): The optical film according to claim 1, having a diagonal length of 250 mm or larger.

12. (Original): The optical film according to claim 1, wherein the $\Delta xy(\text{max})$ is 0.005 or smaller.

13. (Original): The optical film according to claim 1, wherein the $\Delta xy(\text{max})$ is 0.003 or smaller.

14. (Original): A liquid crystal display comprising:

the optical film according to claim 1; and

a liquid crystal cell;

wherein the optical film is disposed on at least one surface of the liquid crystal cell.

15. (Original): An image display apparatus comprising the optical film according to claim

1.

16-17. (Canceled)

18. (New): A quarter wavelength plate comprising:

a retardation film satisfying $n_x^f > n_y^f = n_z^f$, and

a liquid crystal layer satisfying $n_z^c > n_x^c \geq n_y^c$,

where “ n_x^f , n_y^f , n_z^f ” and “ n_x^c , n_y^c , n_z^c ” indicate refractive indices in an X-axis direction, a Y-axis direction and a Z-axis direction in the retardation film and the liquid crystal layer, respectively, with the X-axis direction being an axial direction exhibiting a maximum refractive index within a plane of the retardation film or the liquid crystal layer, the Y-axis direction being an axial direction perpendicular to the X axis within the plane and the Z-axis direction being a thickness direction perpendicular to the X axis and the Y axis.

19. (New): A brightness enhancement film comprising a layer having a circularly polarized light separating function and the quarter wavelength plate according to claim 18.